

J A P A N · E C O N O M I C · I N S T I T U T E

JEI

R E P O R T

A Two-Part Report: A and B

NO. 29A

July 31, 1992

JAPANESE FIRMS GET HELP IN COPING WITH LABOR MARKET SHIFTS

SUMMARY

Competition in a global marketplace is not just among companies but among work forces. Advancing technology requires more specific knowledge or training for at least some workers. In Japan, more than in the United States, the school system turns out graduates well-versed in basic learning skills and teamwork. Through training programs companies foster the concept of teamwork and try to prepare their employees for various job requirements. The government plays a role in this process by offering subsidies for training and encouraging attention to human resource issues.

In a changing employment landscape — in which the services sector is the main job generator, technology is growing more complex, demographic shifts are adding new twists to job planning and diversified sourcing is expanding in a multinational corporate world — other countries are interested in whether Japan's activist approach for educating and training employees helps speed labor market adaptation. Japan's current economic problems and the efforts of employees there to attain a life-style less centered on work may complicate labor market restructuring.

Labor Market Faces Variety of Changes

Japan long has highlighted the importance of education as a means of making the most of its human resources. Like most nations Japan points to people as its most valuable asset, but the country's lack of abundant natural resources underscores this truism. Harvard University economist Dale Jorgenson has calculated that improvements in the quality of labor boosted real Japanese economic growth by a full 1 percentage point each year between 1960 and 1979.¹ Since education served Japan well in developing an industrialized society, a logical correlation suggests education and worker training would be cornerstones for adapting to labor market changes associated with the growing importance of service industries as employers, the internationalization of many corporations, demographic shifts and other less predictable forces. The Democratic Party has made this assumption

in the United States by urging government involvement in education and training as a way of helping to satisfactorily maintain or provide good jobs at home (and the associated high standard of living) for all those seeking work.

Government involvement in addressing the transitions of a dynamic economy has potential pitfalls. The Bush administration's explanation of its aversion to industrial policy is that government is not in the business of picking winners and losers. Market forces may be better at identifying areas necessary for adjustment than government policymakers, this theory holds. Critics of this approach point out that some planning is necessary, however. To address the long-term aging of the labor force and an expected shortage of workers in the prime of life, for example, Japan has encouraged training of the older worker so that he or she could be employed suitably into the future. Implementation, however, remains in the hands of corporate actors who have the final say in deciding what type of training is most suited. In Japan's case the government sets guidelines and offers subsidies for training, but the frontline players decide the course of action.

As long as workers are adequately educated in Japan and additional training increases productivity within the firm, Japanese corporations will have an incentive to continue to employ high-skilled workers at home while shifting jobs with low-skill content abroad. The accelerated movement of production overseas was one method of business restructuring that followed the revaluation of the yen in the second half of the 1980s (see *JEI Report No. 9A*, March 6, 1992). The spread of multinational corporate operations and the efforts by Japan's trading partners to open markets, including for foreign direct investment, means that moving more jobs offshore will continue to be an option for businesses in Japan as elsewhere. Worker education and training will be among the primary tools used to adapt to labor market shifts as economies and societies undergo change.

Education System Focuses on Basics

Japan's teamwork approach to fielding a work force — in which responsibilities devolve to the worker for learning, the schools for instilling fundamental knowledge and cooperative-style work habits, the government for setting school standards and workplace training policies and the company for continued training — offers flexibility to a labor market assailed by change. The system that serves at least three-quarters of the high school-age population tends to produce a generalist; this product, grounded in basics, gives employers the opportunity to then provide the training necessary to the specific tasks at hand. Such an option coincides neatly with a work world in which changes are happening quickly. By not expecting workers to have all their training before they enter a company, corporate Japan acknowledges its role in providing continuing education to meet the higher degree of complexity arising in a society bombarded with information and technological changes.

The litany of what's right with Japan's education system is familiar and bears only brief mention for how it prepares students for the work world. Most often cited is the high degree of literacy and numeracy achieved by the average high school graduate. Although analysts point out that the brightest students from around the world might be generally comparable, the achievements of Japanese students on average are recognized as outpacing the averages in most other developed countries, including the United States.

What this means for a potential employer is that a Japanese high school graduate most likely has basic skills in reading, writing and mathematics. While this might seem an obvious assumption, a 1990 report by the Office of Technology Assessment noted that in the United States, "Even among those who graduate from high school ... the bottom third academically are poorly prepared for work." The study further said that deficiency in basic skills affects as much as 20 percent of the work force of

some firms.² Thomas Rohlen of Stanford University has suggested that the length of the school year in Japan and the number of hours spent in academic pursuits during the school day and at night on homework provide what could be equivalent to four additional years of schooling, about the same amount of time needed to obtain a bachelor's degree from an American college.³

Along with the grounding in basics another important contribution of the Japanese school experience to employee formation is the emphasis on cooperative efforts. Students are urged to work together to arrive at answers in Japanese schools, an experience that is said to familiarize them with developing unanimity of purpose and group cooperation. A U.S. commission of business and education leaders described these as important attributes for employees of the 1990s. In *What Work Requires of Schools*, a 1991 report for the Department of Labor by the Secretary's Commission on Achieving Necessary Skills, participants cited the importance of employees having good interpersonal relations, including the ability to work as part of a team and teach others skills. The focus by Japanese schools on group effort, which stymies development of "star" players, also has its share of critics, who say that the process submerges individualism, which they usually link to creativity. Other school-derived socialization lessons, valued at least by Japanese companies, include the importance of hierarchy, with older students helping younger ones in school clubs, for example.

A much-studied, often-criticized component of the Japanese school system is the use of examinations to decide who gets into the most prestigious schools. In past and current practice major corporations and the government target their recruiting on the most esteemed universities. The system shapes not only what is taught (whatever the exams are expected to contain) but who generally will run the country in the ensuing generation. Essentially the exams stratify the future ranks of workers. Students with advanced learning abilities will strive to compete for the highest exam scores, while those with less ability will accept a lower strata. Exam-taking starts early (prekindergarten in some cases), but the most critical are those for college. What these exams signal to corporations is not necessarily intelligence or creativity but diligence and ability to learn. One Japanese engineer speaking to a gathering of U.S. and Japanese colleagues quipped that many firms considered the results of the college entrance examinations sufficient data on which to base hiring; the college education, itself, had less value because companies would convey the specific training needed by employees.⁴ In this way the government policy that established entrance examinations for public universities (a policy followed by private schools as well) helps companies target their recruiting efforts for what they see as the most desirable, educable employees.

The Path Least Taken

Not everyone tests well. For these students or those who want to specialize — about one-fourth of the Japanese high school population — various vocational programs are available. Not all these students will enter an occupation that corresponds to their training; nevertheless, they tend toward the category of specialist. About one-third of those who bypass enrollment in academic high schools attend what are termed technical schools; the rest enroll in either a commercial (clerical), home economics, agriculture, fishery, nursing or other type of training institution. Even at technical high schools almost 60 percent of the time is spent studying general subjects similar to those in a regular high school. Nearly all the rest of the course work focuses on practical training (15 percent) or special courses (about 22 percent).

Another possibility for those on the nongeneralist path is a vocational training center, established by local governments under the auspices of the Ministry of Labor. Students seeking basic instruction at these institutions, which also offer redevelopment training and skill upgrading to those already in the work force, spend about 6 percent of their time on general studies, slightly less than one-fourth on basic practical training, about 45 percent on applied training and about one-fourth on special courses. While both the Ministry of Education and the Ministry of Labor have vocational programs serving those who have not worked before, the MOL schools more often enroll workers in need of retraining or seeking to upgrade skills (82 percent of the slots available in 1990 were devoted to providing the latter services).

Also serving specialization seekers are 62 technical colleges operating under the Ministry of Education; most of the schools concentrate on engineering subjects. A provision for students at these technical colleges to transfer to a university engineering program has enhanced the image of these schools, according to a study by David Cairncross and Ronald Dore of the Japan-Europe Industry Research Centre.⁵ This option indicates broader recognition in Japan of a necessity for specialized education and training.

What happens to workers with specific technical training in times of economic adjustment is as important as what happens to those with a general education. One U.S. study indicates that reemployment opportunities for people with specific skills is less than for those with general skills. Writing in the 1987 *Industrial and Labor Relations Review*, University of Massachusetts professors Michael Podgursky and Paul Swaim noted that "narrow vocational training is a risky investment" for U.S. workers seeking to be reemployed.⁶ The effect on Japanese seeking work initially or seeking reemployment is less clear. However, a 1980 survey of firms intending to recruit those just out of school for technical jobs showed that the average respondent weighed "education or training readily applicable to jobs" as the most important criteria (40 percent), followed closely by "general intelligence and adaptability" (39.8 percent). For large corporations the adaptability criteria was most favored (57.4 percent to 31.1 percent for applicable training).⁷ Big firms are the companies most likely to need flexibility since they generally have more job rotation; plus they can provide training more easily.

As the technological component of a job increases, however, so does the need for either specialization or expanded education. Companies can adapt either by laying off workers in favor of those with updated training or offering the training through work. Another possibility, to be discussed later, is to hire specialists on an as-needed contract basis. Since most Japanese firms, especially large ones, have not tended to view layoffs as a first choice, job training is a popular option.

Current Training Efforts

Who Provides Training - As many as 70 percent of the Japanese establishments surveyed by the Ministry of Labor in 1991 offered some form of off-the-job training during which employees continued to receive their salary. This off-the-job training is distinct from on-the-job efforts that observers of corporate Japan characterize as almost universal. Least likely to offer off-the-job training are companies employing 30 to 100 people, but a solid majority of these firms (65.6 percent) had such programs in 1991. Not surprisingly, of those firms employing more than 1,000 workers 96.6 percent of the respondents provided some type of training. The finance, insurance and real estate industries ranked at the top of MOL's survey (see Table 1).

Who Receives Training - The extent of training varies according to industry and the expectations of how training will benefit a company. In 1988 a larger proportion of the companies in the finance, insurance and real estate industries provided training to their employees via formal programs than did firms in other industries (see Table 2). Efforts to boost productivity, a common goal across industries, might focus on training managers to streamline production or service. Similarly, technical training can improve workers' familiarity with new equipment and procedures as well as introduce new employees to company practices. The two major recipients of training in most Japanese companies are new recruits and managers, although mid-level technical employees rank high on the list at smaller companies (see Table 3).

Types of Training - The introduction — some might say indoctrination — given new recruits at large corporations often is considered a crucial first step in companies that promote a career-long relationship with employees. At these initial sessions the employer takes a day, several days or a week to outline corporate goals and expectations. Management also hopes to instill company spirit and camaraderie that will encourage employees to link their lives and fortunes to the company. One observer estimated last year that large Japanese companies spend an average of ¥10 million (\$74,100 at ¥135=\$1.00) for first-year training, which is in addition to the estimated ¥5 million (\$37,000) spent on recruiting every year.⁸

In addition to these introductory sessions Japanese recruits typically receive extensive on-the-job training. The early training of new employees is part of a process that supports development of a strong relationship between mentors (superiors) and subordinates; this, in turn, forms the basis of some of the networking ties considered important in corporate Japan. Frequently

Table 1: Establishments Offering Off-the-Job Training in Japan, 1989 and 1991*

	<u>1989</u>	<u>1991</u>
By Industry		
All Respondents	69.3%	70.0%
Construction	80.6	66.9
Finance, Insurance and Real Estate	83.7	85.0
Wholesale and Retail Trade and Restaurants	62.8	71.7
Services	76.3	80.2
Manufacturing	62.1	66.8
Transportation and Communications	57.4	68.6
By Company Size		
1,000+ Employees	97.3%	96.6%
500-999	94.4	93.6
300-499	88.0	89.5
100-299	80.0	78.1
30-99	63.6	65.6

*Limited to establishments with 30 or more full-time workers that provide training, whether as part of a formal program or on an ad hoc basis.

Source: Ministry of Labor, Human Resource Development Bureau, "Report of a Survey on Actual Conditions of Private Education Training," March 1992.

Table 2: Establishments With Formal Off-the-Job Training Programs in Japan, 1988*

	<u>To All Workers</u>	<u>To Selected Workers</u>
All Respondents	27.4%	29.8%
Construction	22.0	51.2
Finance, Insurance and Real Estate	60.6	16.6
Wholesale and Retail Trade and Restaurants	28.0	25.2
Services	22.6	22.3
Manufacturing	25.8	34.0
Transportation and Communications	26.9	31.6

*Limited to establishments with 30 or more full-time workers that offer training as part of a human resource plan.

Source: Ministry of Labor, as cited in Toshio Ishikawa, *Vocational Training* (Tokyo: Japan Institute of Labor, 1991), p. 30.

Table 3: Priorities for Company Training by Selected Career Grades and Ages in Japan, 1984

	Company Size				
	5,000+ <u>Workers</u>	1,000- 4,999 <u>Workers</u>	300-999 <u>Workers</u>	100-299 <u>Workers</u>	30-99 <u>Workers</u>
New Recruits					
New Graduates	65.2%	65.2%	61.1%	49.1%	29.7%
Mid-Career Recruits	1.1	3.7	6.6	11.9	17.0
Mid-Level Workers					
Clerical	13.8	15.8	8.9	8.9	7.9
Technical	19.5	20.9	27.2	30.8	32.0
Production	20.2	23.3	28.6	30.4	31.2
Managers	65.6	55.9	45.0	35.9	27.3
Older Workers	0.7	0.7	0.3	1.0	1.5
Other	1.1	1.0	0.6	0.4	1.4

Note: Participating firms were given the choice of two responses.

Source: Ministry of Labor, as cited in Toshio Ishikawa, *Vocational Training* (Tokyo: Japan Institute of Labor, 1991), p. 23.

cited as an on-the-job practice that promotes familiarity with company functions and personnel is job rotation. At extremes job rotation has functioned to allow corporations to redistribute personnel to areas where they are most needed. Job rotation also is recognized in many companies as a step in the promotion process.

While on-the-job training has an important place in labor force adjustments and productivity growth, major adaptations to labor market restructuring can be found in off-the-job training as well. This can include skill upgrades through company-sponsored workshops or those offered at training centers. Even after-hours meetings of quality control circles to determine how to improve production of a certain item counts as training, at least in some firms. The most expensive form of off-the-job training probably is the overseas study programs offered to selected employees by the government and usually the largest corporations. Selection depends on personnel policies and, at times, on whether an employee is motivated to pursue formal training.

Companies also encourage self-development by their employees, either by helping with tuition costs (an option provided by 78.9 percent of the respondents to a 1989 MOL survey) or allowing time on the job for such pursuits (61.7 percent of respondents). Paid educational leave was least popular, but among those offering such a plan 49 percent allowed time off for up to nine days. An increasing number of enterprises are looking into ways of promoting employee self-development, according to a 1991 report for the Japan Institute of Labor.⁹ In this way companies share the cost of educational development (with the employee contributing primarily study time) and also can take note of employee enthusiasm for improving skills or knowledge. The government promotes self-development as well as other company training programs with subsidies.

Who Pays - The money that Japanese businesses put into job training is expected to be returned through improved productivity. As overall productivity has grown, so has the demand for education and training, according to a study by Jacob Mincer of Columbia University and Yoshio Higuchi of Keio University.¹⁰ The industrywide average of what companies pay for training and education as a share of their total labor costs runs about 0.3 percent, based on data compiled in 1985 by the Ministry of Labor (see Table 4). This value may be biased downward because the employment situation at that time was fairly bleak, with only 11.5 openings for every 17 applications. The relative

Table 4: Expenditures for Education and Training in Japan, 1985

(as share of total labor costs)

	Company Size				
	5,000+ Workers	1,000- 4,999 Workers	300-999 Workers	100-299 Workers	30-99 Workers
Mining	--	0.3%	0.3%	0.1%	0.2%
Construction	0.05%	0.5	0.5	0.2	0.2
Manufacturing	0.5	0.4	0.3	0.2	0.1
Utilities	1.2	1.6	0.4	0.5	0.4
Transportation and Communications	0.2	0.2	0.3	0.2	0.1
Wholesale and Retail Trade	0.2	0.4	0.3	0.3	0.3
Finance and Insurance	0.1	0.3	0.4	0.8	0.2
Real Estate	--	0.2	0.4	0.4	0.2
Services	0.3	0.6	0.4	0.2	0.2

Source: Ministry of Labor, *Yearbook of Labor Statistics* 1985.

availability of workers may have kept training investment lower than normal in that reporting year, although Mr. Mincer has noted that Japanese firms tend to invest more in training during slow periods, presumably because of reduced pressure to maintain production.¹¹

Business also receives some help from government in addressing employee training costs. Partially in preparation for the mid-1990s, when the absolute number of workers in Japan is expected to begin shrinking, Tokyo in 1985 amended its Human Resources Development Promotion Law of 1969 to enhance the amount of subsidies offered to companies, particularly small and medium-sized firms, that implement employee training programs. The law specifically encouraged attention to human resource issues in recognition of changes in the labor force brought about by the expansion of the services industry, technological innovations, the aging of the work force and internationalization. Last year the law was amended again. Its five purposes are:

- To encourage companies to set up human resource development programs. The person in charge would draft a development program, give advice and information on educational and training opportunities, plus be a liaison with government on these issues.
- To assist employees' self-development.
- To promote public vocational training.
- To arrange evaluation systems for human resources.
- To enhance international technical cooperation.

Government financial assistance under the human resource development law is available only to those enterprises that have implemented a human resource development plan and participate in the central government's unemployment insurance program. In addition to providing jobless benefits, unemployment insurance premiums fund government vocational training benefits as well as various subsidies for improving employment opportunities for older workers and job development at the local level. Although employees and employers each pay 0.55 percent of total wages as the premium for jobless benefits, companies alone are required to pay an additional 0.35 percent of total wages as a premium to fund training programs and related services. The total 1.45 percent of payroll for unemployment insurance premiums is higher for agricultural, fishery and forestry firms, which contribute more toward jobless benefits, and even higher for construction companies. The latter pays a combined 1.3 percent jobless premium, but companies face a 0.45 percent of payroll costs for the training and service programs.

Among the activities funded by the unemployment insurance program are:

- Human resource development. Eligible costs include operating expenses for in-company group training, entrance and tuition fees for off-site training and wages paid to employees during the training. For companies with fewer than 300 employees (less than 50 workers in the retail and services industries and less than 100 for wholesalers), the subsidy is one-third of the costs. Larger firms can have one-fourth of their costs covered.

Grants for vocational training vary according to an employee's age. The youngest possible recipients are those aged 25 to 34 at small and medium-sized firms assigned to receive specialized training, including for technological advances. The earliest an employee at a larger company becomes eligible for a grant is at age 35; here the money is for training necessary for a job transfer. Workers aged 45 and older are eligible across-the-board for subsidized training that will enable them to keep working after they reach their company's retirement age. Whenever training is aimed at helping employees on the verge of retirement, the subsidies are higher than otherwise. For example, a large firm would be reimbursed for up to one-third of the cost of in-house training (a smaller firm one-half) but only one-fourth (one-third for smaller firms) if the training does not target preretirement employees. The maximum payment per employee also varies with purpose. The smallest expense allowable per worker — ¥50,000 or \$370 — is for training in-house for nonretirement purposes.

- Self-development. Whenever businesses that qualify for subsidies give paid time off for educational training, the government has agreed to pay one-fourth of large firms' expenses and one-third of those for small and medium-sized companies. Reimbursement per employee is limited to a maximum of ¥100,000 (\$741) per course if the employee is older than age 55 and half that amount if younger. Subsidies to cover wages paid during training to participants is in the same proportion. Workers aged 50 and over who sign up on their own for training after their work day can get up to ¥100,000 (\$741) or half the cost of tuition (whichever is smaller). Between ages 45 and 50 workers can get half that amount.

- Skill examinations. Qualifying small and medium-sized companies can receive government assistance of up to one-third the cost of developing skills tests or administering the exams, with a maximum payout per situation of ¥500,000 (\$3,700).

- Business diversification. Small and medium-sized enterprises that provide training in connection with the diversification of their operations can receive reimbursement for two-thirds of the expenses involved in training and the same proportion to cover the wages of workers in training.

- Other vocational training purposes. Small and medium-sized firms or their trade associations also can receive assistance under certain circumstances for building vocational training centers or conducting joint, authorized training sessions.

As can be seen from the conditions placed on the grants, Tokyo is emphasizing preparation for a labor market where older workers are more plentiful. Also of concern are the small and mid-sized businesses that have trouble attracting workers during periods of labor shortage. Promotion of plans to cope with these situations raises questions of whether this approach has enough built-in flexibility to adjust to a variety of labor market conditions.

Tokyo's Approach to Shifting Labor Trends

Policy-makers in all countries are befuddled by how much government should help businesses and workers in adjusting to labor market changes and how much should be left to the economists' laws of supply and demand in the marketplace. Japan's experiences in coping show a mix of government interest and market management in addressing, through education and training, the increasing number of service-sector jobs, changing demographics and the internationalization of

business. Perhaps fundamentally, the government's role in school-based education has an impact on the labor market, for good or ill.

Expansion of Tertiary Industries and Noncareer Employment - Among the primary considerations as the services sector becomes the major job generator in economically developed countries is whether these jobs will require more or less specialization. Of interest in Japan is how much service-sector companies will focus primarily on keeping a small group of core employees, supplemented by a larger work force of part-time and contract workers. The former group could be expected to receive a high degree of training, particularly if involved in occupations requiring advanced technical skills.¹² Less training might be expected for those involved in part-time work. A shift to contract workers, however, raises questions about who is responsible for training, the company or the prospective employee who might need to present specialist qualifications. Contract workers in Japan do not need to be specialists and, in fact, may be employed in many of the same jobs as regular workers but without the range of benefits — such as company-provided training — associated with career-path employment.

Off-the-job training in the services sector in 1991 ranged from 85 percent participation among finance, insurance and real estate firms to 68.6 percent of the establishments in the transportation and communications industry, with varying numbers of employees receiving training in the companies that offer it. More finance-related firms offered training to all their employees than did any other industry as reported in one 1988 MOL survey (Table 2), but only about 58 percent of all respondents had instituted regularly scheduled training programs and these tended to focus training on fewer, selected employees. One important consideration for the finance, insurance and real estate industries is the small percentage of older workers (see Table 5). As workers age they are more likely to be employed in the narrowly defined services trades. The declining numbers of older workers employed in all but services trades may indicate that other industries push retirement at age 55 or 60 rather than attempting to retrain older workers to meet technological change. Firms may see less reason to invest in training for older workers if the long-term payback is judged too small or the jobs for which they are employed require little training.

A similar rationale holds for part-time workers, the majority of whom are employed in the services sector. Employment figures for 1990 indicate that nonregular workers represented about 11 percent of service-sector staffing. Nonregular employees comprised 13 percent of the employees in wholesale, retail, dining, finance, insurance and real estate establishments. Companies in these industries along with transportation, communications and utility firms provided nearly 82 percent of the nonregular jobs in 1990. These same 1990 figures indicated that women, who make up almost 70 percent of the nonregularly employed, find most of their jobs in the services sector.

A 1991 survey by the Ministry of Labor indicated that of the enterprises surveyed only 21.6 percent of the male part-time employees under the age of 40 and just 19.9 percent of their female counterparts received training. The numbers dropped for both men and women in successive age groups, with only 4.6 percent of male and 2.6 percent of female part-time workers aged 60 and older receiving training. The survey, which classified full-time workers according to management, professional, clerical, service and technical occupations, showed that male technical and professional workers in the youngest age group received the highest share of training, 74.4 percent and 71.6 percent, respectively. For women in that age group the proportion receiving the most training worked in office or clerical jobs, 65.9 percent; the second-highest category was service or sales personnel, 64.5 percent. In successive age brackets the largest percentage of women to receive training never topped 31 percent, the figure for female managers in the 40-49 age group. Most respondents noted that the major reason no training was offered to older female employees was that there were no employees in that category. Management training for men in upper-age brackets predominated over training of other specialists. In the 40-49 age group at least 45 percent of all but male office workers received some form of training.

Table 5: Employment Distribution of Older Workers in Japan, 1990

(as share of age group)

	<u>50-54</u>	<u>55-59</u>	<u>60-64</u>	<u>65+</u>
By Company Size				
1,000+ Employees				
Male	31.8%	23.7%	9.7%	6.6%
Female	15.4	13.9	13.2	15.1
100-999				
Male	32.6	32.2	32.9	25.2
Female	33.3	31.6	28.1	21.1
10-99				
Male	35.6	43.2	57.5	68.3
Female	51.3	54.5	58.7	63.9
By Industry				
Manufacturing				
Male	42.4%	37.6%	24.1%	25.8%
Female	46.7	42.0	29.2	25.9
Wholesale and Retail Trade				
Male	13.1	10.8	8.9	10.0
Female	11.9	11.1	9.4	10.0
Finance and Insurance				
Male	3.7	3.5	2.9	1.9
Female	6.7	6.9	10.0	13.2
Services				
Male	12.2	16.0	29.7	34.6
Female	26.6	30.1	40.5	41.2

Source: Ministry of Labor, *Yearbook of Labor Statistics 1990*.

A further implication of the increasing number of services jobs and the likelihood that at least some of these jobs are associated with less training is the potential for employment in the services sector to provide a buffer, targeted for layoffs in the current economic downturn but offsetting the projected shortage of "prime" workers. Recent government policies, in fact, have encouraged the hiring of older workers and women as ways of combating labor shortages. The current slow-growing economy provides indications of how women's jobs often are the first to go. A July report from the Securities Dealers' Association of Japan noted that women held three-fourths of the 16,000 jobs eliminated in the securities industry in a nine-month period ending in March.¹³ Another report indicated that several banks are considering hiring female university graduates in clerical positions because they could be employed as well in nonclerical jobs. Clerical positions, however, have less job security than career jobs.

Japan's current economic troubles have resulted in many companies announcing that they would hire fewer university graduates next year and in some cases pare staff. Attempts to consolidate core workers and rely on more part-time and contract workers well might encourage more attention to management training, since managers would be expected to motivate a more diversified group of people.¹⁴ Another result of this consolidation would be to enhance the opportunities for specialists to gain contract work and for Japanese firms to reach out to foreign companies to engage in joint research and development (see JEI Report No. 28A, July 17, 1992).

Companies obviously are less interested in providing training for noncore employees. One result of a move to contract labor might be to prompt employees to seek out more training on their own to enhance their employability. The tendency here might be toward specialization, which could be a detraction in hiring, as noted by Messrs. Podgursky and Swaim. Although contract work does not necessarily equate with work performed by specialists, the weakening of a system that encourages conformance to the ideal of career-long employment could free talented workers to change jobs more often. In the year through February 1992 the number of people who changed jobs, whether the most talented or not, reached a postwar high of nearly 2.8 million, up 7.8 percent. A new attitude that does not discourage job changing could motivate employees to obtain more education on their own.

Companies, too, might respond to the current environment by revising their training practices. One reason suspected for corporate Japan's willingness to invest in training is that workers are expected to remain with a company until retirement. Training not only increases an employee's value to the firm but often is used by firms as a motivating factor for promotion, higher pay and prestige. Studies show that companies have made special efforts to retain the most educated employees (with job benefits, such as assistance in housing loans and specially designed pension plans, for example). The current economic climate could encourage even more training of the most valued employees and much less training of other workers.

Another reason for companies to offer their most valued employees specialized training is that studies have indicated that the more specific the job training, the less likely the employee will be able to transfer those skills to another job at a commensurate or better salary.¹⁵ In the past when Japanese firms worried less about a highly valued employee jumping ship the type of training could be general or specific since the employee was likely to stay. As some Japanese firms that sent employees for training at American universities have found, however, general skills are transferable. Business management or engineering skills learned here can be transferred easily if an employee decides to go to work for a U.S. company or to free-lance after returning to Japan. Thus, a concern with job mobility, cited by many labor analysts as one impediment to American companies investing more money in training, may give Japanese companies another reason to concentrate on specific training courses.

Companies on the cutting edge of technological change are among the most likely to entice the highest educated employees with promises of training. One study published by Rand Corp. in 1986 noted that in times of rapid technological change advanced technical training tends to be available primarily within companies rather than from outside sources.¹⁶ The results seem especially relevant to Japan, where corporate R&D efforts outpace those of universities and government-run institutions.

Internationalization - Since large employers in postwar Japan have tried to avoid layoffs, the move to offshore operations would appear to have less of an impact on domestic employment than the parallel move by American companies. When Japanese manufacturers relocate production abroad, they typically retrain workers at home for jobs in new, diversified lines of work. The government extends assistance to companies that offer training because they are undergoing diversification. Moreover, the types of jobs shifted abroad tend to require fewer skills since a lower cost of labor is one reason manufacturers relocate offshore. The remaining, more highly technical jobs most likely would be those requiring continuous updates.

As internationalization relates to Japan's efforts to assume global political responsibilities commensurate with its economic wealth, Tokyo has agreed to encourage more technology transfers, primarily through training of foreign workers sent to Japan (see *JEI Report No. 7A*, February 21, 1992). Multinational corporations offer similar opportunities for employees from their subsidiaries in foreign countries. These training programs enroll only skilled workers, a condition that has not benefited Japanese firms scrambling for unskilled laborers in the dirty, dangerous and disliked occupations rejected by more and more Japanese. The high level of schooling received by most Japanese means they actually may be overeducated for these jobs, which, in itself, raises questions of whether

adoption of a more open policy on immigration by unskilled laborers would benefit Japan. Pride in homogeneity is only one of the cultural obstacles to a broader immigration policy (see *JEI Report* No. 23A, June 15, 1990).

Another aspect of internationalization is that Tokyo is encouraging a better standard of living, partly to meet its trading partners' demands for higher domestic consumption. Among the changes in attitudes encouraged under the official government line is for companies to adopt shorter workweeks, which would increase leisure time. Actual implementation of this recommendation, which is not likely in the near term, could result in a greater separation of the goals of the worker and those of the company. If job-hopping increases as a result of such changes and the falling number of labor market entrants, companies might rethink their training strategies in line with studies that show specific company-provided training cuts down the transferability of skills. The premium of a general educational background might impact hiring of those with vocational training under such conditions since the more specifically trained a worker is, the less flexible he or she may be in a rapidly changing business environment.

Education Policies - Criticism of entrance examination "hell" in Japan has focused on the regimentation required of young students and the costs in terms of creativity and well-rounded lifestyles. Although schools there produce highly literate and mathematically capable students who are accustomed to working in teams, not everyone is satisfied that graduates will be adaptable to an information-oriented society that requires varied skills and creative problem-solving approaches. The 1985 National Council on Educational Reform, in fact, urged Japan "... to do away with the uniformity, rigidity, closedness, and lack of internationalism, all of which are deep-rooted defects of our educational system, and to establish ... the principle of putting emphasis on individuality."¹⁷

Another concern with Japan's educational system as it relates to preparing the next generation of workers is that the emphasis on examinations results in polarizing students onto two tracks: those who move toward college and those who take vocational courses. The selection process is not necessarily based on individual aptitude but on who is more scholastically inclined, according to Nobuo Shimahara of Rutgers University. "Moreover, increasing numbers of students in academic schools are unable to meet the rigid standards because their abilities and aptitudes vary considerably." Mr. Shimahara noted that the frustration arising from the rigidities has led to an increase in school violence and juvenile delinquency.¹⁸ Despite concerns over these problems, the system appears to be working well for corporate Japan. Not only do schools produce a potential employee who is capable of learning new skills on the job, but the educational system weeds out those who do not conform or do not learn quickly, other contributions valued by Japanese businesses.

Unlike American firms and companies in other industrialized countries, Japanese businesses have had less incentive to look into business/school partnerships, the topic of a recent report by the Organization for Economic Cooperation and Development.¹⁹ Many of the reasons that companies in other OECD countries are looking at partnerships with schools stem from a dissatisfaction with their country's respective education systems. This is one more indication that the approach being taken by students, schools, government and companies in Japan is working well from the corporate point of view. Any moves to change the education system in Japan, however, may impact this relationship.

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Tooru Ando provided research assistance.

Notes

¹Dale W. Jorgenson, "Productivity and Economic Growth in Japan and the United States," *American Economic Association Papers and Proceedings*, May 1988, p. 218.

²U.S. Congress, Office of Technology Assessment, *Worker Training: Competing in the New International Economy* (Washington, D.C.: Government Printing Office, September 1990), p. 10.

³Thomas Rohlen, *Japan's High Schools* (Berkeley, California: University of California Press, 1983), p. 160.

⁴Reference to these remarks is in Robert Cutler (ed.), *Engineering in Japan: Education, Practice and Future Outlook* (Joint Symposium of the American Association for the Advancement of Science and the Japan Society for Science Policy and Research, Washington, D.C., February 17, 1991) (Washington, D.C.: 1991).

⁵David Cairncross and Ronald Dore, *Employee Training in Japan*, contract report prepared for U.S. Congress, Office of Technology Assessment, March 1990.

⁶Michael Podgursky and Paul Swaim, "Job Displacement and Earnings Loss: Evidence From the Displaced Worker Survey," *Industrial and Labor Relations Review*, XLI, No. 1, October 1987, pp. 17-29.

⁷Toshio Ishikawa, *Vocational Training* (Tokyo: Japan Institute of Labor, 1991), p. 25.

⁸Naoya Sugio and Emiko Ohki in "Job-hopping trend proves hard for firms to ignore," *The Japan Times*, January 3, 1991, p. 3, quote Japanese business consultant Masanobu Fukushima.

⁹Ishikawa, *op. cit.*, p. 31.

¹⁰Jacob Mincer and Yoshio Higuchi, "Wage Structures and Labor Turnover in the United States and Japan," *Journal of the Japanese and International Economies*, II, 1988.

¹¹Telephone interview with Jacob Mincer of Columbia University, July 22, 1992.

¹²For a look at trends in specialized training see Lee Lillard and Hong Tan, *Private Sector Training: Who Gets It and What Are Its Effects?* (Santa Monica, California: Rand Corp., 1986), p. 67.

¹³"Japanese Women Hurt By Economy," *Wall Street Journal*, July 21, 1992, p. A9.

¹⁴Tadashi Amaya, *Recent Trends in Human Resource Development* (Tokyo: Japan Institute of Labor, 1990), p. 40.

¹⁵Lillard and Tan, *op. cit.*, and Mincer and Higuchi, *op. cit.*

¹⁶Lillard and Tan, *op. cit.*

¹⁷As cited in Nobuo K. Shimahara, "Overview of Japanese Education: Policy, Structure, and Current Issues," in Robert Leestma and Herbert Walberg (eds.), *Japanese Educational Productivity* (Ann Arbor, Michigan: Center for Japanese Studies, 1992), p. 26.

¹⁸*Ibid.*

¹⁹Donald Hirsch, *Schools and Business: A New Partnership* (Paris: Centre for Educational Research and Innovation, 1992).

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.